

03040202-05
(Lynches River)

General Description

Watershed 03040202-05 (formerly 03040202-090) is located in Chesterfield, and Kershaw, Darlington, Lee, Florence, and Sumter Counties consists primarily of the **Lynches River** and its tributaries from the Little Lynches River to Sparrow Swamp. The watershed occupies 126,827 acres of the Sandhills and the Upper and Lower Coastal Plain regions of South Carolina. Land use/land cover in the watershed includes: 40.4% agricultural land, 30.1% forested wetland, 22.0% forested land, 4.6% urban land, 2.6% scrub/shrub land, 0.2% water, and 0.1% nonforested wetland.

This portion of the Lynches River accepts drainage from its upper reaches, together with Turkey Creek, Merchants Mill Creek, and Bells Branch. The river then accepts drainage from Cousar Branch near the City of Bishopville and Lee State Park followed by Mill Branch, another Mill Branch, Rose Branch, and Back Swamp. Further downstream, Back Swamp drains into the river followed by Polecat Branch (Mill Bay). The Lynches River County Park is located near the confluence of the Lynches River and Sparrow Swamp. The portion of the river from the park upstream to U.S. 15 crossing is designated as a scenic river. There are a total of 246.5 stream miles and 159.3 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
PD-080	P/W	FW	LYNCHES RIVER AT S-28-15 4.5 MI SE BETHUNE
PD-071	P/W	FW	LYNCHES RIVER AT US 15/SC 34
PD-112	S/W	FW	COUSAR BRANCH 1/4 MI BELOW BISHOPVILLE FINISHING CO.
PD-364	P/SPRP	FW	LYNCHES RIVER AT US 401
PD-319	P/W	FW	LYNCHES RIVER AT SC 403
PD-093	P/INT	FW	LYNCHES RIVER AT S-21-55

Lynches River - There are five SCDHEC monitoring sites along this section of the Lynches River. This is a blackwater system, characterized by naturally low pH conditions. Recreational uses are fully supported at all sites. At the furthest upstream site (**PD-080**), aquatic life uses are fully supported. A significant increasing trend in dissolved oxygen concentration and decreasing trend in total phosphorus concentration suggest improving conditions for these parameters. Further downstream (**PD-071**), aquatic life uses are again fully supported. Significant decreasing trends in five-day biochemical oxygen demand, total phosphorus concentration, total nitrogen concentration, and fecal coliform bacteria concentration suggest improving conditions for these parameters. Although pH excursions occurred at the furthest two upstream sites, they were typical of values seen in blackwater systems and were considered natural, not standards violations.

Further downstream (**PD-364**), aquatic life uses are not supported due to pH excursions. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, total phosphorus concentration, and total nitrogen concentration suggest improving conditions for these parameters. At the next site downstream

(**PD-319**), aquatic life uses are partially supported due to pH excursions. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, total phosphorus concentration, and total nitrogen concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters. At the furthest downstream site (**PD-093**), aquatic life uses are partially supported due to pH excursions. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, total phosphorus concentration, and total nitrogen concentration and increasing trends in dissolved oxygen concentration suggest improving conditions for these parameters.

Cousar Branch (PD-112) - Aquatic life uses are not supported due to pH excursions. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported at this site and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

*A fish consumption advisory has been issued by the Department for mercury and includes the **Lynches River** within this watershed (see advisory p.43).*

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-039	GB	MIDDENDORF	BISHOPVILLE #4

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)	NPDES# TYPE COMMENT
LYNCHEs RIVER CITY OF BISHOPVILLE WWTP PIPE #: 001 FLOW: 2.5	SC0035378 MAJOR DOMESTIC
LYNCHEs RIVER TOWN OF LYNCHBURG WWTP PIPE #: 001 FLOW: 0.107	SC0042676 MINOR DOMESTIC
LYNCHEs RIVER TOWN OF LAMAR WWTP PIPE #: 001 FLOW: 0.65	SC0043702 MINOR DOMESTIC
LYNCHEs RIVER SUMTER COUNTY PIPE #: 001 FLOW: 0.2, 0.5	PROPOSED MINOR DOMESTIC
LYNCHEs RIVER TRIBUTARY SC PRESTRESS/SAND PLANT 2 PIPE #: 001 FLOW: M/R	SCG730713 MINOR INDUSTRIAL

BACK SWAMP
TOWN OF LYNCHBURG WTP
PIPE #: 001 FLOW: M/R

SCG645019
MINOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME
FACILITY TYPE

PERMIT #
STATUS

LEE COUNTY LANDFILL
MUNICIPAL

311001-1101
CLOSED

Land Application Sites

LAND APPLICATION SYSTEM
FACILITY NAME

PERMIT #
TYPE

SPRAYFIELD
FOUNTAINS LANDROMAT

ND0000671
DOMESTIC

Mining Activities

MINING COMPANY
MINE NAME

PERMIT #
MINERAL

SC PRESTRESS CORP.
PRESTRESS MINE

1212-41
SAND

MCCUTCHEON CONSTRUCTION CO., INC.
MCCUTCHEON MINE

1183-41
SAND; SAND/CLAY

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains the Town of Lynchburg and portions of the City of Bishopville and the Town of Cartersville. U.S. Hwy. 76 and a rail line cross the watershed south of Lynchburg connecting the Cities of Sumter and Florence. Interstates I-20 and I-95 also cross the watershed and some growth may be seen around the interchanges. An additional source of future growth is the Lee Correctional Institution. The Darlington County Water and Sewer Authority may extend water lines into the area east of the Lynches River, which could precipitate residential growth, but no significant commercial or industrial growth. The remainder of the watershed is rural with agricultural and timberland uses.

Lynches Rivers and Sparrow Swamp Watersheds (03040202-04, -05)

